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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,575	03/08/2002	Ralf Schmid	1987	7182

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11/05/2003

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103 East Neck Road
Huntington, NY 11743

EXAMINER

GRAHAM, GARY K

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,575

Applicant(s)

SCHMID, RALF

Examiner

Gary K Graham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it should be in single paragraph form. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: In the written description, reference to the claims appears improper (ex. page 1, line 3). The written description should not look to the claims to define the invention.

Appropriate correction is required.

Claim Objections

Claims 5-8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 5 is an improper dependent claim. There is no requirement that the apparatus as set forth in claim 5 must be used by the method of claim 1 from which it depends. Claim 5 merely says "An apparatus for executing...". In other words, the apparatus as set forth in claim 5 could be used to clean building windows or the like in

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addition to the vehicle windows. Therefore an apparatus meeting the structure of claim 5 could be made that does not have to be employed by the method of claim 1. See MPEP 608.01(n)III.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, line 3, there is no antecedent basis for "the wiping direction".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Scherz (U.S. 4,180,886).

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The patent to Scherz discloses the invention as is claimed, including a wiper strip (9) which is set into oscillations by ultrasonic, piezoelectric, transducer (11). Note arrow (16) which shows the direction of the oscillations. Such is lateral to the length of the wiper strip. While Scherz discloses that the mass (12) is acoustically inactive, column 2, lines 60-68, set forth that some of the ultrasonic energy is radiated into such mass and thus the wiper strip.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai (U.S. 5,070,571).

The patent to Arai discloses the invention as is claimed, including a wiper strip (fig.3) having flexible support (3), wherein a piezoelectric vibrating element (1) is provided thereon to impart oscillations to the blade rubber in a direction lateral to the blade rubber extension. Such oscillations can be perpendicular or parallel the windshield surface. Arai discloses that the vibrating element can be controlled by sensors or manually controlled by a user.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2, 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (U.S. 5,070,571).

The patent to Arai discloses all of the above recited subject matter with the exception of the frequency of the vibrator being in the ultrasonic range and the vibrating element being controlled by an electronic control unit.

While Arai discusses that high frequency is to be employed, he does not state that such is ultrasonic. However, one of skill in the art, given the teachings of Arai, would optimize such to find the most effective frequency. Where general conditions of claims are disclosed in the prior art (Arai clearly sets forth high frequency), it is not inventive to discover the optimum or workable conditions by routine experimentation. It would have been obvious to one of skill in the art to discover the optimal frequency for the vibrator, including ultrasonic vibration, by routine experimentation, lacking some criticality of such frequency.

With respect to claim 5, while Arai does not specifically set forth an electronic control unit, he does set forth that sensors are used to automatically control the vibration operation. It seems that some form of electronic control would be inherent to provide for the automatic controlling. However, it would have been obvious to one of skill in the art to provide an electronic control unit for the device of Arai, if one is not already employed, to provide for compact, reliable controlling. Use of electronic control units is notoriously well known. Merely providing such to control the vibrator of Arai does not appear inventive.

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With respect to claim 6, the support (3) is considered flexible as it consists of a multi-link hinged arm assembly for coupling the rubber blade to the wiper arm (fig.3).

With respect to claim 7, the flexible support (3) is considered to be "formed" onto a profiled back of the blade rubber. Note that formed does not impart any structure to the support, at least none not disclosed by Arai.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (U.S. 5,070,571) in view of Bexton (U.S. 5,724,699).

The patent to Arai discloses all of the above recited subject matter with the exception of water applied to the window close to the wiper strip.

The patent to Bexton discloses providing a spray head (70) on the wiper arm to provide fluid to the windshield during wiper operation to enhance wiper cleaning action.

It would have been obvious to one of skill in the art to provide the arm of Arai with a spray head thereon, as clearly suggested by Bexton, to enhance cleaning action during the wiper operation.

Allowable Subject Matter

It appears that, based on what applicant is attempting to claim, claim 8 would be allowable if rewritten to overcome objection and the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

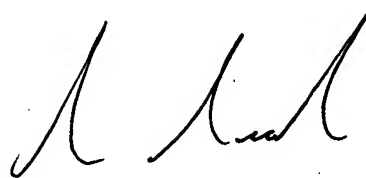
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K Graham whose telephone number is 703-308-1270. The examiner can normally be reached on Tuesday to Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on 703-308-2920. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'GK Graham', written in a cursive style.

Gary K Graham
Primary Examiner
Art Unit 1744

GKG

03 November 2003